Form 2995-0127

H-010010

Job 776526-00
BO# 545214

GENERAL RADIO COMPANY
WEST CONCORD • MASSACHUSETTS, 01781

TEL. 617 369-4400 (Concord)
617 646-7400 (Boston)
TWX 710 347-1051

Supplementary Instructions

2995-0127 Range Control

The 2995-0127 Range Control is an accessory instrument for use with a 1680-A Automatic Capacitance Bridge Assembly (modified for remote range control). The instrument is used to select and hold a desired measurement range.

The Range Control includes a 35-volt power supply and a switch to apply the supply voltage to the range-control lines of the bridge in the proper binary sequence. The BCD logic used is 1-2-4-2 (identical to 1-2-4-8 up to range 7) with:

true = 0 volts

false = +35 volts

A cable is provided to connect to the AUX connector at the rear of the bridge. An EXT connector at the rear of the Range Control provides access to other terminals of the bridge connector.

Operation

Set the BALANCE control of the bridge to HOLD RANGE and set the BRIDGE RANGE control of the Range Control to the desired range. To restore the bridge to normal operation set the BRIDGE RANGE control to INT.

Diagrams

Drawing 2995-9127-2D shows a schematic diagram of the instrument.

OFFICIAL RECORDS STATION
FILE COPY
FACILITIES DEC 1 1967

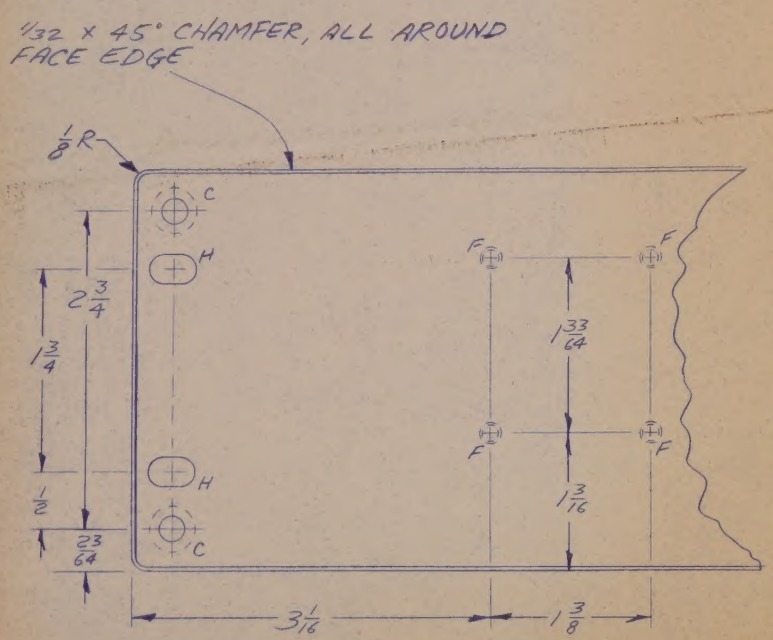
Form 2995-0127

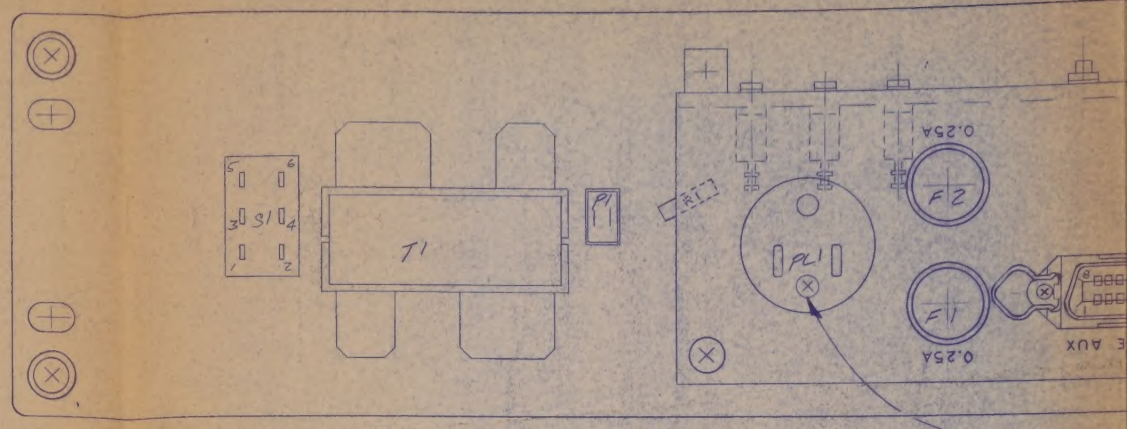
Socket Connections

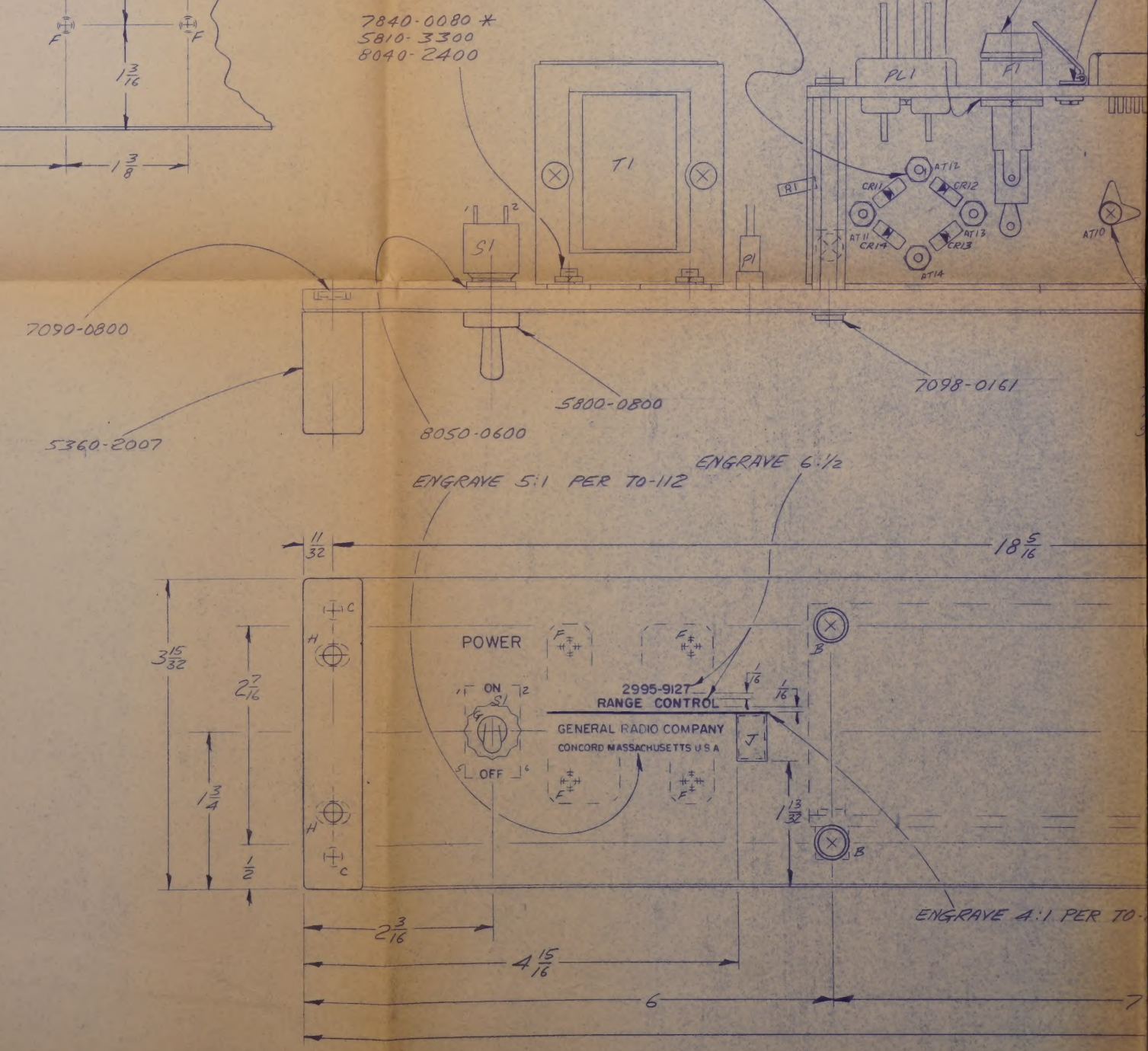
BRIDGE AUX	EXT	BRIDGE AUX CONNECTION	FUNCTION
1		H3	Range Set 1
2		F3	Range Set 2
3		F1	Range Set 4
4		H1	Range Set 2
5	5	A6	CO
6	6	B3	FR
7	7	B5	FH
8	8	A2	STW
9	9	F13	PRT'
10	10	G4	+12 V
11	11	G6	+6 V
12	12	G8	-9 V
13	13	G10	-15 V
14	14	G2	GND

Output Signals

BRIDGE RANGE	BRIDGE AUX 1	2	3	4
INT	OPEN	OPEN	OPEN	OPEN
1	0	+	+	+
2	+	0	+	+
3	0	0	+	+
4	+	+	0	+
5	0	+	0	+
6	+	0	0	+
7	0	0	0	+







*USE RED LOCTITE WHEN ATTACHING STUDS TO PANEL

HOLES:
A = .144 DIA (#27 DRILL) ——— (1)
B = .219 DIA (7/32 DRILL) ——— (4)
C = .219 DIA (7/32 DRILL) 13/32 DIA C'BORE 1/8 +1/64 -0 DEEP, REVERSE SIDE ——— (4)
D = .386 DIA ("W" DRILL) ——— (1)

F = 10-32 BOTTOM TAP, 3/16 +0 -1/64 DEEP, REVERSE SIDE ——— (4)
G = TOD-42-2 ——— (1)
H = TOD-54-2 ——— (4)
J = TOD-225 ——— (1)

PANEL
2995-0841

MAT'L: .250 ± .013 ALUMINUM, 3003-H14, MILL FINISH
FINISH: CRACKLE PER G.R.CO. SPEC. ES-FO-3, CHARCOAL GRAY, FACE & EDGES.

NUMBER	ISSUE
2995-9127-ID	2A

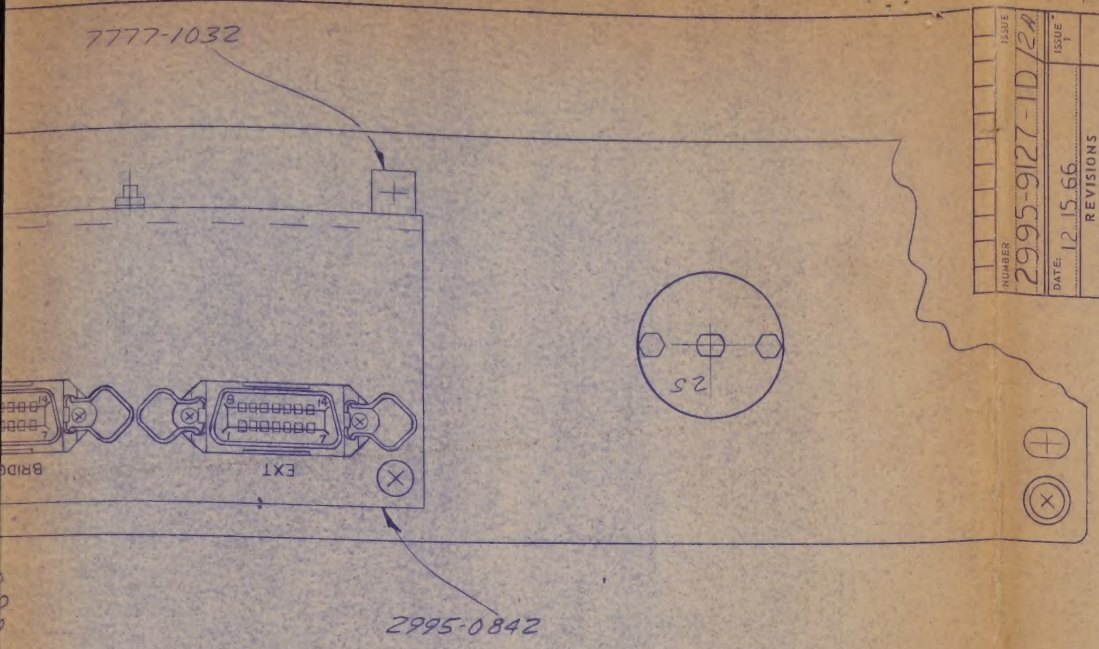
DATE	REVISIONS	ISSUE
12 15 66	REVISED PER MFG RECORD CCN 1-25-67 ENG	2
	PER MARKED RECORD CCN 4-17-67 CAH	2A

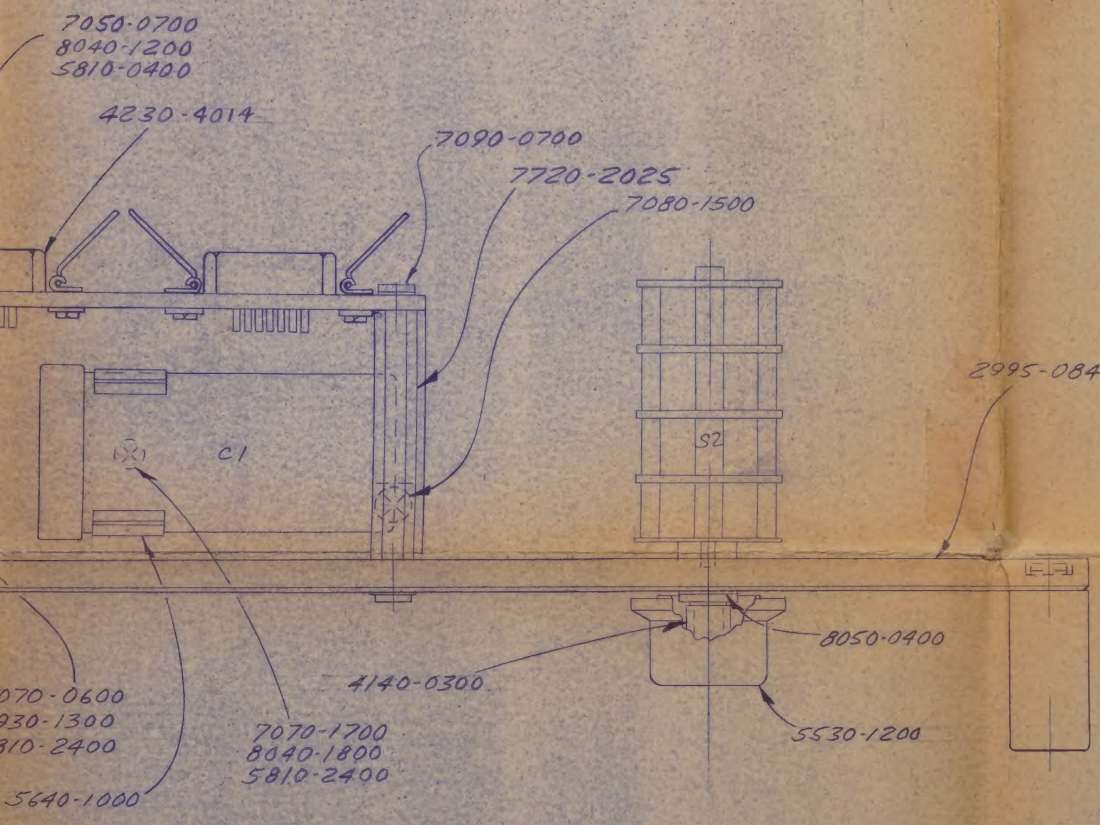
SCALE Full | FIRST USED ON
DR. FRG | CH. CAH | APP.

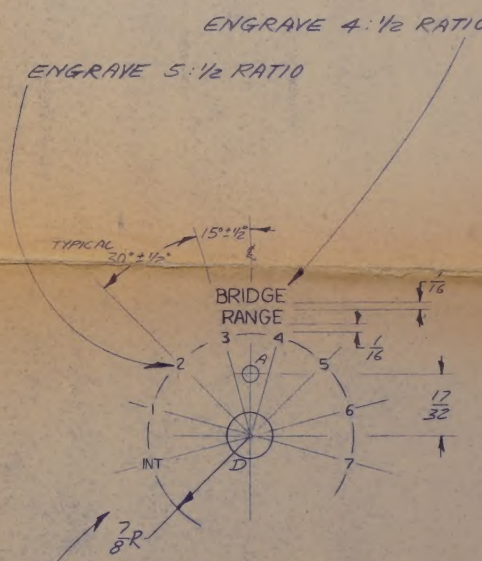
GENERAL RADIO COMPANY
W. CONCORD, MASS. U.S.A.

NUMBER 2995-9127-ID ISSUE 2A

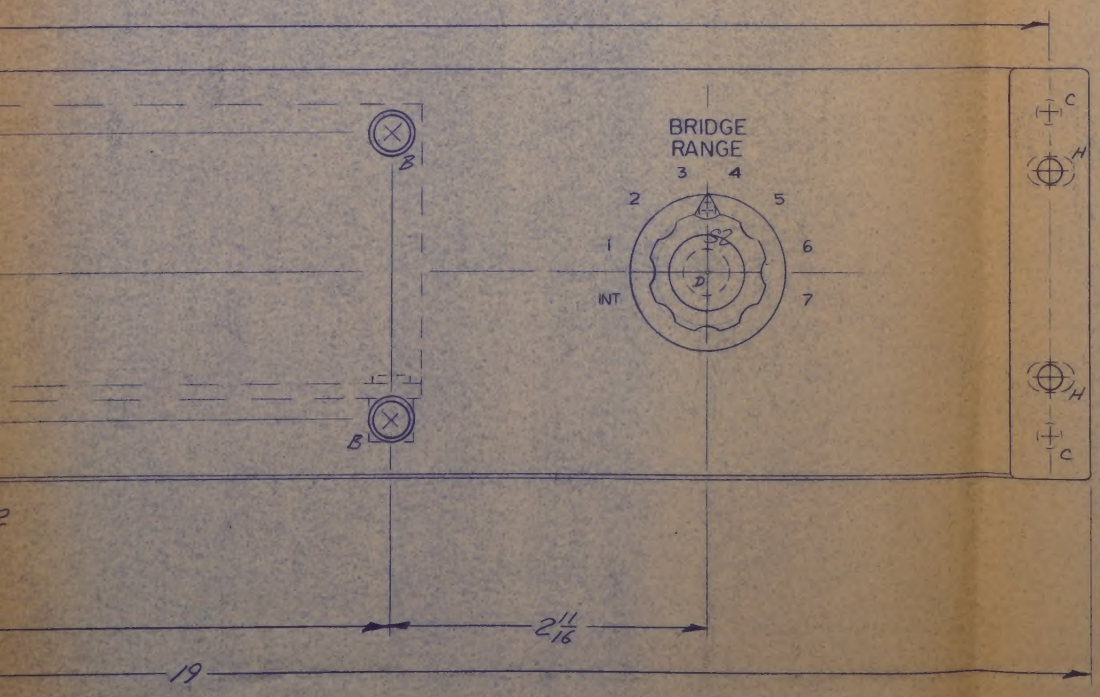
RANGE CONTROL
2995-9127

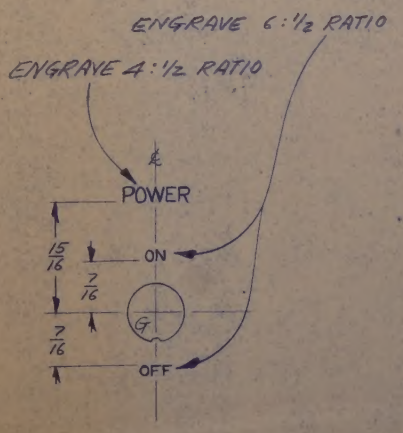






ENGRAVING TO BE CENTERED ON INTERSECTION OF RADIAL LINES AND ARC.





NOTE. 1. TOLERANCE ON FRACTIONAL DIMENSIONS ± 1/64 UNLESS OTHERWISE SPECIFIED.
2. HOLE TOLERANCES PER G.R.CO. SPEC. ESPM-123 UNLESS OTHERWISE SPECIFIED.